

COMMUNICATIONS PROCESSOR FOR ELECTRIC POWER SUBSTATIONSAbstract of the Disclosure

a The communications processor includes an electronic network system which includes a total of 17 individual ports, four quad universal asynchronous receiver/transmitter devices, each of which serves four separate ports, and a microprocessor which processes and controls the flow of data under the control of stored control programs, command settings and command logic. Connected to a plurality of those ports referred to as IED ports are intelligent electronic devices, <sup>IEDs</sup> such as protective relays or meters, while connected to other ports, referred to as master ports, are remote terminal units or a local computer or terminal or a modem which can be connected to an external telephone line. The apparatus includes both buffer and long-term storage for development of a database, as well as an IRIG-B capability for synchronization of the time clocks of the connected devices.